We claim:

1. The use of aqueous dispersions comprising at least one at least partially neutralized ethylene copolymer wax selected from among ethylene copolymer waxes which comprise, as comonomers in copolymerized form,

   (A) from 26.1 to 39% by weight of at least one ethylenically unsaturated carboxylic acid and

   (B) from 61 to 73.9% by weight of ethylene,

   and ethylene copolymer waxes which comprise, in copolymerized form,

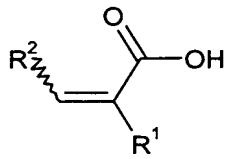
   (A') from 20.5 to 38.9% by weight of at least one ethylenically unsaturated carboxylic acid,

   (B') from 60 to 79.4% by weight of ethylene and

   (C') from 0.1 to 15% by weight of at least one ethylenically unsaturated carboxylic ester,

   as auxiliaries for wastewater treatment.

2. The use as claimed in claim 1, wherein at least one ethylenically unsaturated carboxylic acid (A) or (A') has the formula I,



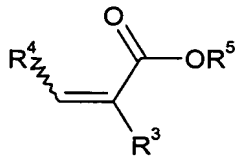
I

   where the radicals are defined as follows:

   R^1 is selected from among hydrogen and unbranched or branched C_1-C_{10}-alkyl,

   R^2 is selected from among hydrogen and unbranched or branched C_1-C_{10}-alkyl.

3. The use as claimed in claim 1 or 2, wherein at least one ethylenically unsaturated carboxylic ester has the formula II,



II

where the radicals are defined as follows:

R^3 is selected from among hydrogen and unbranched or branched C_1-C_{10}-alkyl,

R^4 is selected from among hydrogen and unbranched or branched C_1-C_{10}-alkyl.

R^5 is selected from among unbranched or branched C_1-C_{10}-alkyl and C_3-C_{12}-cycloalkyl.

3. The use as claimed in any of claims 1 to 3, wherein R^1 is hydrogen or methyl.

4. The use as claimed in any of claims 1 to 4, wherein R^2 is hydrogen.

5. The use as claimed in any of claims 1 to 5, wherein R^3 is hydrogen or methyl.

6. The use as claimed in any of claims 1 to 6, wherein R^4 is hydrogen.

7. The use as claimed in any of claims 1 to 7, wherein the ethylene copolymer wax or waxes have been at least partially neutralized by means of a basic alkali metal compound or at least one amine.

8. The use as claimed in any of claims 1 to 8, wherein the ethylene copolymer wax or waxes have been at least partially neutralized by amine, where at least one amine is selected from among ammonia, N-alkylethanolamines, alkanolamines and polyamines.

9. A process for the treatment of wastewater, which comprises treating wastewater with one or more dispersions as set forth in any of claims 1 to 9.

10. A process as claimed in claim 10, wherein solids which settle or float are separated off after the treatment of the wastewater with one or more aqueous dispersions.

11. A process for preparing aqueous dispersions as set forth in any of claims 1 to 9, which comprises dispersing one or more ethylene copolymer waxes in water in the presence of at least one basic substance.

12. An aqueous dispersion comprising at least one at least partially neutralized ethylene copolymer wax selected from among ethylene copolymer waxes which comprise, as comonomers in copolymerized form,

(A) from 26.1 to 39% by weight of at least one ethylenically unsaturated carboxylic acid and

(B) from 61 to 73.9% by weight of ethylene,

and ethylene copolymer waxes which comprise, in copolymerized form,

(A') from 20.5 to 38.9% by weight of at least one ethylenically unsaturated carboxylic acid,

(B') from 60 to 79.4% by weight of ethylene and

(C') from 0.1 to 15% by weight of at least one ethylenically unsaturated carboxylic ester.

13. An ethylene copolymer wax comprising, as comonomers in copolymerized form,

(A) from 26.1 to 39% by weight of at least one ethylenically unsaturated carboxylic acid and

(B) from 61 to 73.9% by weight of ethylene.

14. An ethylene copolymer wax comprising, as comonomers in copolymerized form,

(A') from 20.5 to 38.9% by weight of at least one ethylenically unsaturated carboxylic acid,

(B') from 79.4 to 60% by weight of ethylene and

(C') from 0.1 to 15% by weight of at least one ethylenically unsaturated carboxylic ester.